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Carter County Conservation Needs Committee
Land in Carter County

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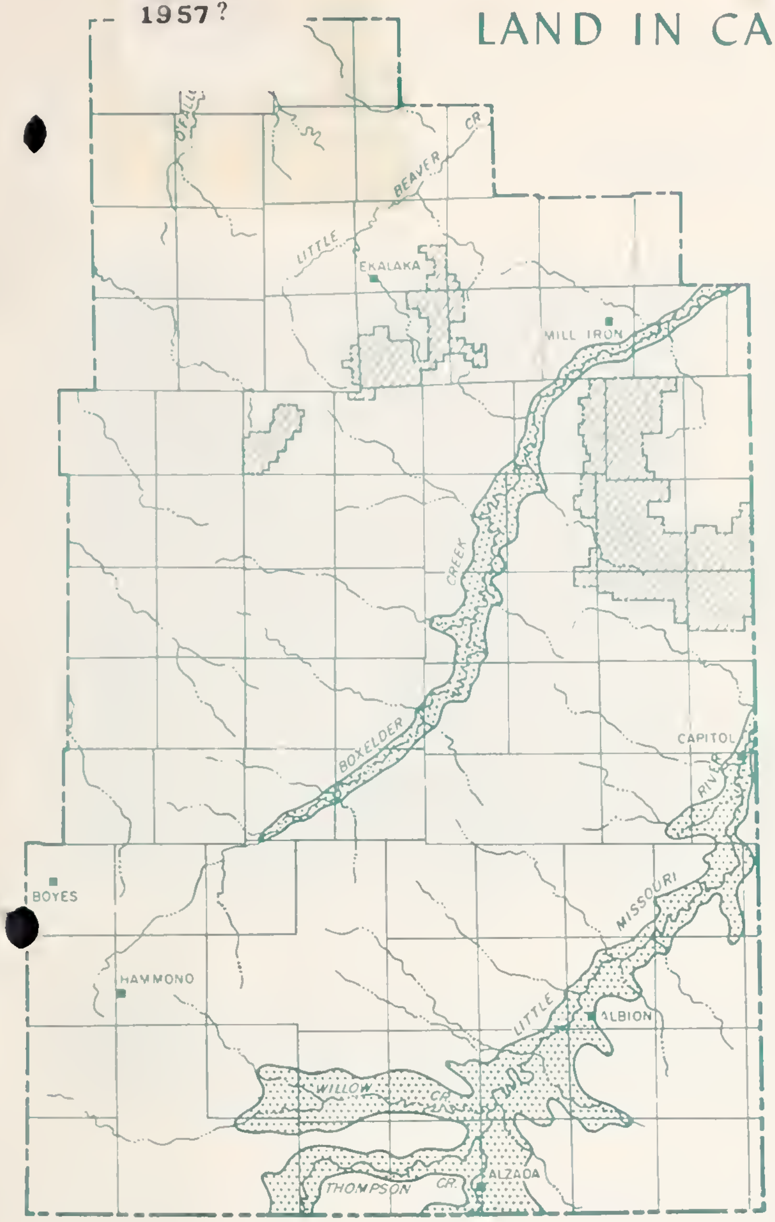
LAND IN CARTER COUNTY



OUR LAND and WATER

☐	Loamy soils of the uplands in northern 1/3 of county are used for rangeland on hilly or steep areas and cropland on nearly level to moderately sloping areas. Soils developing from clay shale and sandstone in southern 2/3 of county used for rangeland.
▒	Alluvium on terraces and bottomlands along creeks and river is used for hay production.
▨	Custer National Forest

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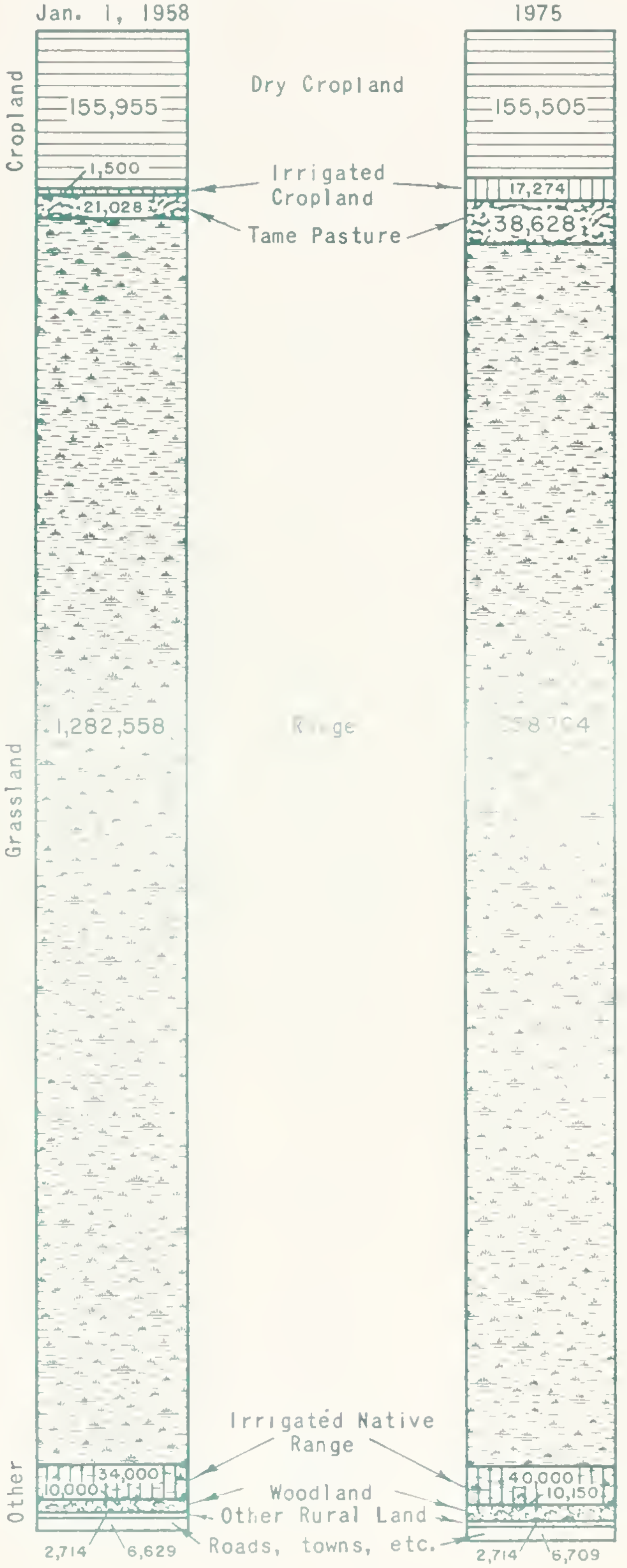
CARTER COUNTY, MONTANA

PLEASE RETURN

In Carter County there are	2,120,320 acres
The area of Federal land is	600,127 acres
Towns, roads, water, etc. amount to	12,438 acres
This leaves a conservation responsibility on	1,507,755 acres

LAND USE TODAY AND EXPECTED BY 1975



Dry cropland will decrease slightly. Marginal cropland will be reseeded to range and pasture. New irrigation will develop on dry cropland and native grassland.

There will be more irrigated land used for hay crops.

An increase of 84 percent in tame pastures will come from reseeding of dry cropland.

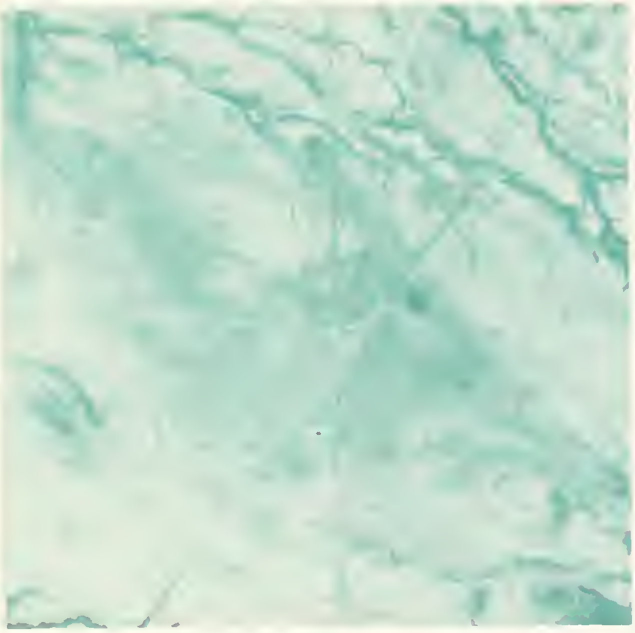
Rangeland will decrease slightly. Marginal dry cropland will be reseeded to rangeland. This reseeded acreage will be more than offset by present rangeland going into cropland use.

Some Federal land will become private land.

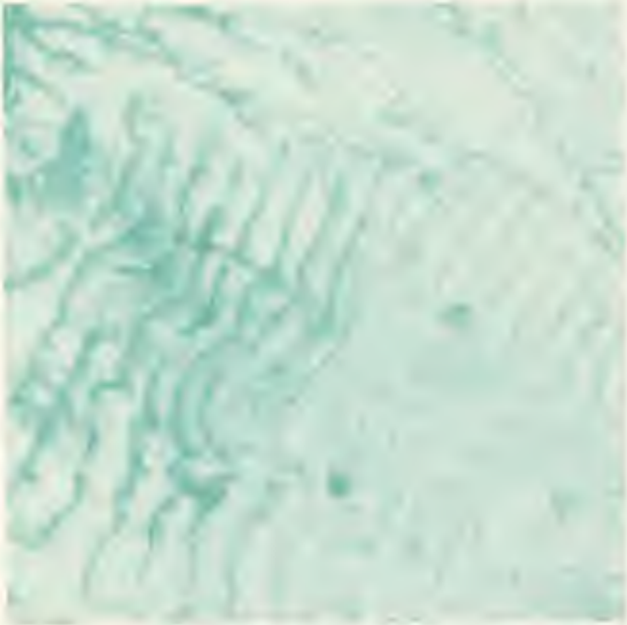
The woodland areas will increase slightly due to new plantings of shelterbelts.

Road will increase slightly.

TREND IN LAND USE



1942 Aerial Photo



1955 Aerial Photo

EXPLANATION: This county is a pioneer in the development of waterspreading. Waterspreading facilities have been developed on 55,000 acres which includes over 800 miles of dike and ditches. This development is being used to increase forage production, both for grazing and winter feed.

WATERSHED INVENTORY

WHAT WAS DONE: Disregarding county or other political divisions the natural drainages were divided into units of 250,000 acres or less. Each subdivision was studied by the committee to determine treatment needs and possible developments which might be met through the small watershed program or by other kinds of local group action.

WHAT IT REVEALED: The watershed areas in the county are mainly rangeland. There is some erosion in portions of the drainages from overgrazing and from floodwaters.

The bottomland soils in the Box Elder Watershed are highly productive. With controlled flood for irrigation these soils are well suited for hay production and irrigated pastures.

Ranchers, individually and in groups, plan on continuing to develop these bottomlands.

THE PROBLEMS AND NEEDED TREATMENT

Strip Cropping
and
Stubble Mulch

DRY CROPLAND	155,505 acres

64% or 99,280 acres of dry cropland are adequately treated.

36% needs treatment--

a. Erosion is the dominant problem on - (Strip cropping, stubble mulch, grassed waterways, etc.)	74,288 acres
b. Unfavorable soil is dominant problem on (Crop rotation, fertilizer, narrow strips)	81,217 acres

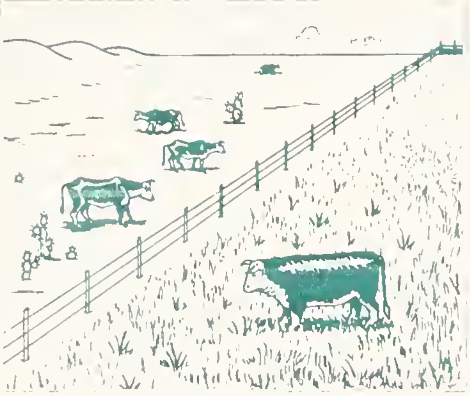
Waterspreading

IRRIGATED CROPLAND	17,274 acres

32% or 5,576 acres are adequately treated

68% needs treatment--

a. Erosion is dominant problem	3,542 acres
b. Excess water is dominant problem	4,544 acres
c. Unfavorable soil is dominant problem	9,188 acres
d. Climate conditions dominant problem	0 acres



Range Management

GRASSLAND (Range, pasture, irrigated native)	1,337,332 acres

50% or 665,352 acres are adequately treated

50% needs treatment--

a. Needs reseeding	19,600 acres
b. Improvement (deferred grazing primarily)	350,028 acres
c. Management (proper stocking, and better distribution)	302,352 acres
d. Needs stockwater development	319,990 acres
e. Protection from fire	199,784 acres
f. Severe erosion problem	6,710 acres
g. Rodent control	340 acres
h. Encroachment of plants	50,000 acres
i. Excess water	0 acres
j. Needs water conservation	23,893 acres
k. Insect and disease control	10,000 acres

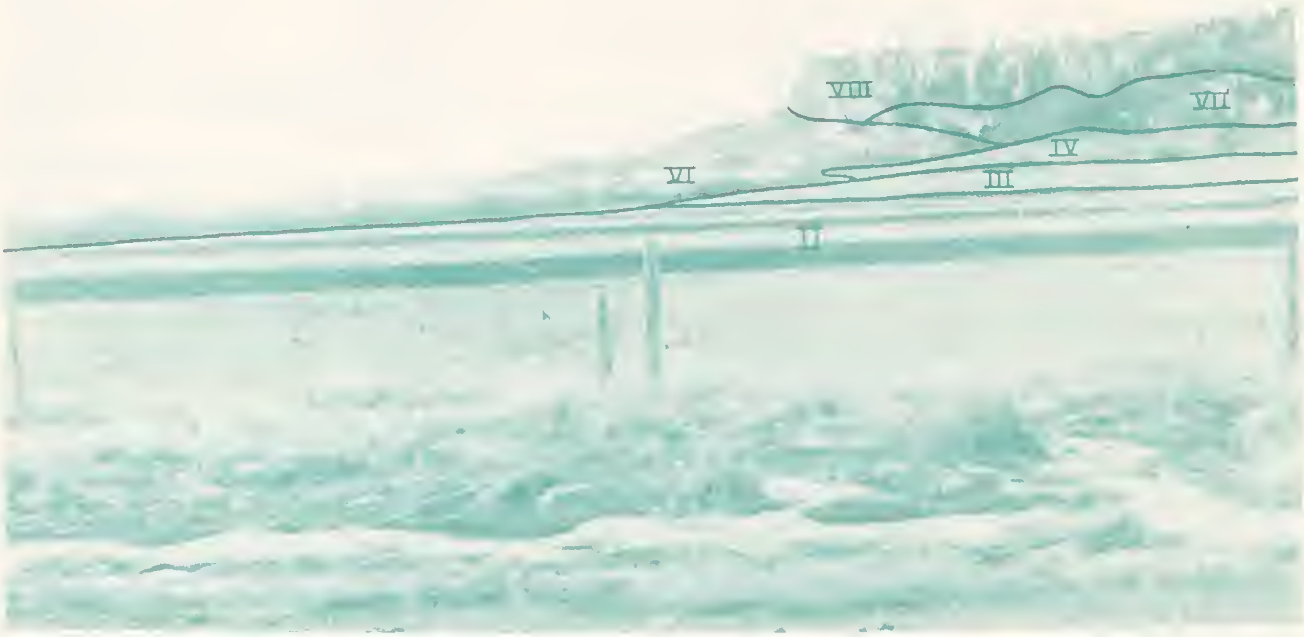
Windbreaks

WOODLAND	10,150 acres
a. Needs establishment (planting)	0 acres
b. Needs stand improvement	500 acres
c. Protection from fire	380 acres
d. Insect and disease control	500 acres
e. Protection from animals	400 acres
f. Erosion control	0 acres
g. Establishment of windbreaks (20 miles)	12 acres

LAND USE CHANGE BY CAPABILITIES

LAND CAPABILITY CLASS	LAND USE 1958	LAND USE CHANGE BY 1975						
		CROPLAND		GRASSLAND		WOODLAND	OTHER	OUT OF AGRI-CULTURAL USE
	Irrigated Cropland	Irrigated	Dry	Pasture	Range			
III	542	542						
VI	958	958						
	Dry Cropland							
II	11,518		18,437					
III	47,850	3,000	51,425					
IV		300	5,000					
VI	96,587	12,932	80,243					
	Tame Pasture							
III	4,115			12,015				
IV	2,286			5,286				
VI	14,627			21,327				
	Range							
II	13,839				6,870			
III	113,851	500*	400*		99,326			
IV	[illegible]				33,634			
VI	[illegible]				1,066,[illegible]98**			80
VII	38,576				38,576			
	Irr. Native Range							
VI	34,000				40,000***			
	Woodland							
II						50		
III	10,000					10,050		
VI						50		
	Other							
VI	2,714						2,714	
TOTAL	1,507,755	18,232	155,505	38,628	1,285,304	10,150	2,714	80

EXPLANATION:			
*	Federal to Private Ownership		900
**	Federal to Private Ownership	Added	13,400
***	Federal to Private Ownership	Added	1,000
			15,300



Land capability classes show how much difficulty or risk is involved in using land.

LAND CAPABILITY DEFINITION

SUITABLE FOR CULTIVATION				NOT SUITABLE FOR CULTIVATION		
CLASS I	CLASS II	CLASS III	CLASS IV	CLASS VI*	CLASS VII	CLASS VIII
Very Good Land No Limitations	Good Land Minor Limitations	Moderately Good Land with Major Limitations	Fairly Good Land Occasional Cultivation with Severe Limitations	Suitable for Pasture, Range and Woodland		Suitable for Wildlife and Watershed
				With Minor Limitations	With Major Limitations	

Increasing Permanent Limitations →

* Some soils in Class VI can be used for crops with unusually intensive management.

WHY THE INVENTORY - Although we are blessed with abundance our resources are not inexhaustible. They must be cared for and used wisely that their productiveness will continue. To assure their wise use we need basic facts about physical problems of conservation, their magnitude, and relative urgency. This inventory contains basic facts. It will be modified and kept current with advances in technology and increased knowledge.

HOW IT WAS MADE - The inventory was initiated in 1957, as part of a national inventory authorized by the Secretary of Agriculture. It is based upon soil surveys of 160 acre samples drawn at random. The soil survey samples were expanded to represent actual conditions in the County. The County Committee used this information along with its knowledge of the County to develop estimates by expected changes by 1975.

WHO DID IT - The inventory and this leaflet were prepared by the Carter County Conservation Needs Committee. The committee consisted of representatives of the County Extension Service, Agricultural Conservation Program Service, Farmers Home administration, U.S. Forest Service, Soil Conservation District, Agriculture Research Service, County Commissioners, and Soil Conservation Service, which acted as chairman.

SUPPLEMENT
TO
CARTER COUNTY CONSERVATION NEEDS INVENTORY

Land Use - Dry Cropland

Practice	Unit	Amount
Conservation Cropping System	Ac.	81,835
Crop Residue Use	Ac.	20,611
Diversion Dam	No.	55
Diversion	Ft.	58,080
Grade Stabilization Structures	No.	50
Grasses & Legumes in Rotation	Ac.	5,250
Grass Waterways	Ac.	633
Stripcropping Contour	Ac.	6,900
Stripcropping Field	Ac.	3,700
Stripcropping Wind	Ac.	15,000
Stubble Mulching	Ac.	134,884
Subsoiling	Ac.	1,750

Land Use - Irrigated Cropland

Conservation Cropping System	Ac.	17,274
Cover & Green Manure Crop	Ac.	1,940
Crop Residue Use	Ac.	2,880
Dams, Multiple Purpose	No.	45
Diversion Dams	No.	35
Diversion	Ft.	26,400
Irrigation Canal or Lateral	Ft.	31,680
Irrigation Field Ditch	Ft.	359,040
Irrigation Land Leveling	Ac.	4,900
Irrigation Pit Reservoir	No.	50
Irrigation Storage Reservoir	No.	90
Irrigation System, Surface	No.	125
Irrigation Water Management	Ac.	5,050
Structure for Water Control	No.	2,300

Land Use - Dry Pasture & Hayland

Hayland Planting	Ac.	3,500
Pasture Planting	Ac.	17,600
Pasture Proper Use	Ac.	38,628

Land Use - Irrigated Native

Diversion Dams	No.	100
Diversion	Ft.	28,370
Farm Ponds	No.	125
Land Clearing	Ac.	385
Land Smoothing	Ac.	15,500
Range Seeding	Ac.	2,100
Structures for Water Control	No.	1,100
Subsoiling	Ac.	1,575

Land Use - Irrigated Pasture & Hayland

Practice	Unit	Amount
Hayland Planting	Ac.	12,187
Pasture Planting	Ac.	3,791
Pasture Proper Use	Ac.	3,941
Rotation Grazing	Ac.	3,941

Land Use - Range

Brush & Weed Control	Ac.	50,000
Contour Furrowing	Ac.	1,500
Farm Pond	No.	1,449
Floodwater Retarding Structure	No.	150
Pipeline for Livestock Water	Ft.	36,960
Pond Sealing	No.	175
Range Deferred Grazing	Ac.	350,028
Range Proper Use	Ac.	1,258,704
Range Renovation	Ac.	175,000
Range Rotation Grazing	Ac.	908,676
Range Seeding on Converted Cropland	Ac.	12,800
Range Seeding	Ac.	15,570
Spring Development	No.	276
Structure for Water Control	No.	1,800
Waterspreading	Ac.	23,893
Wells	No.	328

Land Use - Wildlife

Fish Pond Stocking	No.	2,513
Wildlife Habitat Development	Ac.	950
Wildlife Habitat Preservation	Ac.	1,500
Wildlife Watering Facility	No.	75

Land Use - Woodland

Farmstead & Feedlot Windbreaks	Ac.	380
Field Windbreaks	Ac.	20
Woodland Proper Grazing	Ac.	10,150
Woodland Thinning	Ac.	500

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